and tissues, and thus retards the development of arteriosclerosis. As yet the exclusion of foods rich in cholesterol from the diet has not been advocated, since there are so many such foods and since cholesterol is too valuable a compound of the body cells to be treated in such a cavalier fashion.

The final section of this thoughtful paper discusses the treatment of diabetes and is written in the most characteristic, epigrammatic style for which Joslin is adept. The opening sentences are so forcible and impressive that I cannot do better than to quote them verbatim. "If a diabetic has known enough to live ten years, be sure you know enough to make him live another ten years before you tamper with his diet. The arteries of the young diabetic are elastic and his diabetes is so pliable and amenable to all types of treatment that you can toss him about in your diabetic salon like a rubber doll. Not so the old diabetic. His arteries are thickened and sometimes hard, and his status must be changed as delicately as you would move a choice piece of bric-a-brac. If you wish to keep a few examples of this arteriosclerotic, diabetic bric-a-brac for your son to treat, be cautious. Be guided by my experience in the early part of this century, when with youthful enthusiasm I suddenly reduced the blood sugar of a cherished Commonwealth Avenue diabetic patient, Case No. 11, who at infrequent intervals had mild attacks of angina pectoris. In the early hours of the morning I was called to her untimely death bed. And that other diabetic in 1922, Case No. 705, should be mentioned who also was found dead a few days after I reduced his blood sugar with diet and insulin." Joslin then goes on to state that the rapid reduction of the blood sugar level in elderly diabetics may be disastrous through its effect on a diseased myocardium that is already poorly nourished by sclerotic coronary arteries. In patients with a high blood pressure and a lowering of the sugar tolerance, a hyperglycemia may exist as a compensatory process to supply the requirements of a malnourished heart. Hyperglycemia must not, therefore, be regarded from the diabetic standpoint alone, but from that of the needs of the entire body. In the elderly patient surely avoid any tendency toward hypoglycemia.

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Gastro-Intestinal Disorders

Gastro-Intestinal X-Ray—I find that in commercial x-ray laboratories and in hospital x-ray departments as well, there is a tendency for the general practitioner to refer gastro-intestinal patients with a request for "x-ray examination of the stomach only."

This failure to make complete and thorough examination of the whole tract is a serious and vital mistake. It results in loss of prestige to the physician and disappointment to the patient. The chances of error are high enough without increasing them in this manner.

The reasons for this error arise in a desire to please the patient who wishes to save expense. A patient cannot be expected to understand the reason for "examining any other spot than where the pain is." Whether it is true or not, let us credit the doctor with understanding the reasons. It is easier to feel that he understands, but allows himself to be persuaded to do what the patient wishes because some other clinician or laboratory has done the same thing.

The stomach is the seat of pain referred from many areas in the abdomen. The vegetative nervous system is capable of referring painful sensations either up or down in the spine, and that the stomach or epigastrium is the seat of pain or distress, is no reason that the pathological etiology is located there. Gastric diseases are rare; intestinal diseases are very common, relatively speaking, and when there are gastro-intestinal symptoms we need an intelligent search for the reason, not a simple looking to the spot where the reflex has placed the pain or symptom. This is, of course, true of the entire examination, but we are now speaking of x-ray examination particularly.

The intestines are not the only organ that refer symptoms to the stomach; others are the rectum, the appendix, and the gall bladder.

X-ray apparatus has been developed to a point of great perfection and facility of operation. Our commercial concerns are out to sell this apparatus, and men have installed x-ray equipment who, after having been taught the technical side of the work, are not in any way qualified to interpret the findings. The patient cannot be expected to understand and discriminate in this matter intelligently. I hope for the day when there will be some regulation from "within the party." We need organization in general medicine similar to that in general surgery. I am sure the general practitioner, and laboratory worker as well, would do well to examine the patient completely and to the best of his ability or not at all. If the patient cannot pay, it would be economy in the long run to adjust the price to the patient, or do the work gratuitously.

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Orthopedics

Fusion Operations on the Spinal Column—The joints of the spinal column are major weight-bearing joints, and when so severely distorted by injury or disease that useful motion is no longer to be expected, should be arthrodesed by callus or by fusion operation.

It is two decades since Albee, Hibbs and others pioneered the field of operation, but only within the last ten years has spinal fusion been widely accepted. Such operations are today generally recognized as a most valuable means of promoting and hastening recovery both in tuberculosis and after severe fractures of the spine.

The insertion of a single tibial graft in a cleft in the split spinous processes (Albee's operation) has the advantage of simplicity and preserves the